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XIV. Observations on Cancer salinus. By the Rev. Thomas Rackett, F.R.S. and L.S.

## Read June 16, 1812.

As it is one of the objects of the Society to obtain information respecting such subjects of Natural History in our own country as have been but slightly noticed, I beg leave to present a drawing of Cancer salinus, commonly known by the name of "The Lymington Shrimp or Brine-worm," of which no figure has yet been given by any author.

Linnæus describes it as follows:

C. salinus, macrourus articularis, manibus adactylis, pedibus viginti patentibus, cauda subulata. Linn. Syst. Nat. ii. p. 1056. Linn. Syst. Gmel. 2993.

Maty Diar. Brit. 1756.

Fabr. Entom. Syst. ii. p. 518. Gammarus salinus.

Penn. Brit. Zool. iv. 22. n. 35.

Herbst ii. p. 145.

Pallas It. t. 2.

Habitat in Angliæ salinis Lymingtonianis; Sibiriæ lacubus salsis. Corpus pediculo majus, oblongum. Oculi distantes laterales, pedunculati. Antennæ setaceæ, corpore breviores. Cauda filiformi-subulata, exserta, longitudine corporis. Pedes utrinque 10. patentes et quasi pinnatim digesti.

Gmelin adds, nunc oculis prominulis globosis atris, ovarioque utrinque ovato, nunc oculis nullis, pedibus anticis porrectis cheliferis, an potius Monoculus?

It seems, however, to correspond better with the generic characters of the genus Cancer than those of Monoculus; and indeed among some hundreds I have never observed an individual destitute of two eyes.

Myriads of these animalcula are to be found in the salterns at Lymington, in the open tanks or reservoirs where the brine is deposited previous to the boiling. It attains the desired strength by evaporation from exposure to the sun and air in about a fortnight. A pint contains about a quarter of a pound of salt; and this concentrated solution instantly destroys most other marine animals.

These tanks are called clearers, as the liquor becomes clear in them; an effect which the workmen attribute in some degree to the rapid and continual motion of the Brine-worm, or to the particles which cloud the liquor serving for its food; but this is mere conjecture. So strongly persuaded, however, are the workmen of this fact, that they are accustomed to transport a few of the worms from another saltern, if they do not appear at their own. They increase astonishingly in the course of a few days.

It is observable that the Brine-worm is never found in the sunpans, where the brine is made by the admission of sea-water during the summer, and which are emptied every fortnight, but only in the pits and reservoirs, where it is deposited after it is taken out of the pans, and where some of the liquor constantly remains. When it becomes much diluted with rain-water, from October till May, (during which time the manufacture is at a stand,) a few only of the worms are visible; but at the approach of summer young ones appear in great numbers.

Tab. XIV. Fig. 8. represents Cancer salinus of the natural size.

<sup>9.</sup> the same magnified.

<sup>10.</sup> one of the legs considerably magnified.